

REMARKS

Claims 1-29 are currently pending. Reconsideration of this application is respectively requested in view of the following remarks.

Rejections under 35 U.S.C. § 112, first paragraph

The Examiner rejects claims 1-29 for failing to comply with the written description requirement. More specifically, he asserts that the specification does not provide support for the limitation "wherein the caffeine is added in pure form," which was incorporated into claims 1 and 2 in a response mailed on December 27, 2005. Applicants disagree.

Examples 1 and 2 presented in the specification each describe a composition prepared by adding pure caffeine together with other ingredients. See page 5, lines 11-15 and page 7, lines 16-20. One skilled in the art, in view of the specification, would understand that the inventors possessed the claimed composition in which "caffeine is added in pure form" at the filing date of this application. In this connection, Applicants would like to point out that "[a]n objective standard for determining compliance with the written description requirement is, 'does the description clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed.'" See MPEP 2163.02. In view of this MPEP statement, Applicants submit that, contrary to the Examiner's assertion, the limitation "wherein the caffeine is added in pure form" satisfies the written description.

Rejections under 35 U.S.C. § 112, second paragraph

The Examiner rejects claims 1-29 for indefiniteness. Referring to the limitation "wherein the caffeine is added in pure form" recited in claims 1 and 2, he asserts that it is not clear what is meant by this limitation or what degree of purity is required.

Applicants would like to point out that one skilled in the art would understand that the claims require that pure caffeine, not a mixture containing caffeine and a significant amount of other ingredients, be added to prepare a composition. As to the purity of the caffeine, one skilled in the art would also understand that the caffeine is required to be free or essentially free of impurities to the extent commercially practicable.

Rejections under 35 U.S.C. § 102

The Examiner rejects claims 1-6 as being anticipated by Gorsek, U.S. Patent 6,649,195 (the '195 patent) and rejects claims 1-6 and 16 as being anticipated by Anderson et al., U.S. Patent 5,846,569 (the '569 patent). Claims 1 and 2, the two independent claims, will be discussed first.

Claim 1, as amended, covers a composition containing vitamin B3, quercetin, and caffeine. Claim 2, as amended, covers a composition containing vitamin C, quercetin, and caffeine. In both compositions, caffeine is required to be added in pure form.

The '195 patent discloses a composition for preventing and treating macular degeneration. The composition contains, among others, vitamin B3, vitamin C, quercetin, and a green tea extract. The '569 patent discloses a dietary composition for improving metabolic function. The composition contains vitamin B3, vitamin C, quercetin, and green tea leaves. A green tea extract and green tea leaves may contain caffeine, either mixed with other components and/or embedded in leaves. In other words, caffeine, if any, in both prior art compositions is not added in pure form. By contrast, the caffeine in the composition of claim 1 or 2 is added in pure form. Claims 1 and 2 are therefore not anticipated by either the '195 patent or the '569 patent.

The Examiner appears to take the position that the claimed compositions may contain, in addition to caffeine added in pure form, non-caffeine ingredients present in the green tea extract or the green tea leaves. He therefore concludes that the claimed compositions are not distinguished from the prior art compositions.

The Examiner clearly misinterprets the pending claims.¹ These claims require caffeine added in pure form. They clearly exclude caffeine present as part of green tea leaves or provided in a green tea extract. In other words, the claimed compositions should not include a caffeine-containing green tea extract or green tea leaves (which contain caffeine). Further, the compositions also should not include both caffeine in pure form and all non-caffeine ingredients present in green tea or a caffeine-containing green tea extract. More specifically, for all practical purposes, one skilled in the art, to practice this invention, would not first remove only caffeine

¹ The Examiner appears to believe that claims 1 and 2, reciting open-ended phrase "comprising," cover compositions containing caffeine and all non-caffeine ingredients present in a green tea extract or green tea leaves. As discussed below, although these two claims are open-ended, they simply cannot be interpreted to cover such compositions.

from green tea leaves or a green tea extract and then mix the resulting non-caffeine ingredients with the removed pure caffeine to prepare the claimed compositions. It would not make sense to do so. In sum, contrary to the Examiner's belief, the claimed compositions are different from the compositions described in the '195 patent and '569 patent.

For the reasons set forth above, claims 2-6 and 16, dependent from either claim 1 or 2, are also not anticipated by the '195 or '569 patent.

Rejections under 35 U.S.C. § 103(a)

The Examiner rejects claims 1-15, 26, 27, and 29 for obviousness on various grounds. Applicants will traverse each ground below:

I

The Examiner rejects claims 5 and 6 as obvious over the '569 patent.

Claims 5 and 6 depend from claim 2. Their patentability resides at least in part in the unique feature recited in claim 2, i.e., caffeine added in pure form.

As discussed above, the '569 patent discloses a composition containing green tea leaves. Green tea leaves contain a large number of components, which include caffeine. However, there is no teaching or suggestion in the reference to pick caffeine from this large number of components. Thus, one skilled in the art, in view of the reference, would not have been motivated to specifically select caffeine to arrive at the compositions covered by claims 5 and 6. In other words, claims 5 and 6 are not rendered obvious by the '569 patent.

II

The Examiner rejects claims 1-25 and 28 as obvious over the '195 patent, in view of Gorsek, U.S. Patent 6,551,629 (the '629 patent), and further in view of Rosenberg et al., U.S. Patent 6,579,544 (the '544 patent), Husz, U.S. Patent 6,277,427 (the '427 patent), Pearson et al., U.S. Patent 6,261,589 (the '589 patent), and Xiong et al., U.S. Patent 6,299,925 (the '925 patent).

Among the rejected claims, only claims 1 and 2 are independent. Applicants submit that the patentability of claims 1-15 resides at least in part in a common feature of the compositions of both claims 1 and 2, i.e., containing caffeine in pure form and quercetin.

As discussed above, the '195 patent discloses preventing and treating macular

degeneration with a composition that includes quercetin, but not caffeine added in pure form. The '629 patent discloses improving cardiovascular health with a composition that contains, among others, quercetin and a green tea extract; like the '195 patent, it also does not teach or suggest including in the composition caffeine added in pure form. The '544 patent teaches preventing degenerative conditions with a composition that contains, among others, quercetin. Nowhere in this reference is mentioned caffeine or green tea/green tea extract that allegedly contains caffeine, let alone caffeine added in pure form as required by claims 1 and 2. The '427 patent discloses generating a stimulating effect with a beverage containing, among other, caffeine. The '589 patent discloses generating a positive psychoactive effect with a composition containing, among others, caffeine. Neither the '427 patent nor the '589 patent mentions quercetin. Finally, the '925 patent merely describes a green tea extract formulation for maximum release and delivery of the extract. Nowhere is quercetin or caffeine in pure form mentioned in this reference.

The Examiner's reliance on the '925 patent to reject claims 1 and 2 is clearly misplaced as it is silent on both quercetin and caffeine in pure form. On the other hand, it appears to be his position that it would have been obvious to pick quercetin from the compositions taught in the '195, '629, and '544 patents and pick pure caffeine from the compositions taught in the '427 and '589 patents and combine them to arrive at the compositions of claims 1 and 2. In other words, he seems to believe that combining the teachings of the '195, '629, and '544 patents with the teachings of the '427 and '589 patents would lead to the claimed compositions, which contain quercetin and caffeine added in pure form.

Applicants would like to point out that the nature of the problem to be solved in the '195, '629, and '544 patents is substantially different from that in the '427 and '589 patents. More specifically, the '195, '629, and '544 patents relate to treating or preventing diseases such as degenerative or cardiovascular conditions, while the '427 and '589 patents relate to generating a stimulating or psychoactive effect, which is not relevant to degenerative or cardiovascular conditions. Thus, one skilled in the art would not have been motivated to combine the teachings of the '195, '629, and '544 patents with the teachings of the '427 and '589 patents. He would at most combine the teachings of the '195, '629, and '544 patents or combine the teachings of the '427 and '589 patents.

As mentioned above, none of the '195, '629, and '544 patents teaches or suggests use of caffeine in pure form. Thus, the '195, '629, and '544 patents, in any combination, do not teach or suggest use of caffeine in pure form. In other words, a combination of these three references does not render obvious claims 1 and 2, which require caffeine added in pure form. Also mentioned above, none of the '427 and '589 patents teaches or suggests use of quercetin. Thus, the '427 and '589 patents do not teach or suggest use of quercetin. In other words, a combination of these two references does not render obvious claims 1 and 2, which also require quercetin.

For the reasons set forth above, claims 1 and 2 are non-obvious over the six cited references. So are claims 3-25 and 28, which depend from either claim 1 or 2.

III

The Examiner rejects claims 26, 27, and 29 for obviousness, relying on the '195 patent, in view of the '629, '544, '427, '589, and '925 patents, and further in view of the '569 patent.

Claims 26, 27, and 29, dependent from claim 23, cover a method of enhancing physical performance using the composition of claim 2, which contains caffeine added in pure form and quercetin.

As discussed above, the '195, '629, '544, '427, '589, and '925 patents do not render claim 2 obvious. Thus, neither do they render obvious claims 26, 27, and 29, all dependent from claim 2.

The '569 patent relates a composition for improving metabolic function. As it has nothing to do with treating degenerative or cardiovascular conditions, one skilled in the art would not have been motivated to combine the teachings of this reference with those of the '195, '629, and '544 patents, which relate to treating these conditions. In other words, he would at most have combined the teachings of the '569 patent with those of the '427, '589 and '925 patents.

As mentioned above, none of the '427, '589, and '925 patents teaches use of both caffeine added in pure form and quercetin to obtain a composition. The '569 patent does not cure this deficiency. It does not suggest using caffeine added in pure form (see supra page 7, lines 15-20), let alone a combination of caffeine added in pure form and quercetin. As such, none of the '427, '589, '925, and '569 patents teaches or suggests using both caffeine added in

Applicant : Thomas Christian Lines et al.
Serial No. : 10/692,178
Filed : October 23, 2003
Page : 10 of 10

Attorney's Docket No.: 14682-005001

pure form and quercetin. In other words, these references do not render obvious claims 26, 27, and 29, which require compositions containing both caffeine added in pure form and quercetin.

CONCLUSION


Applicants submit that the rejections asserted in the Office Action have been overcome and claims 1-29, as pending, cover patentable subject matter. Applicants respectfully request allowance of all pending claims.

Please apply any other charges or credits to deposit account 06-1050, referencing Attorney's docket 14682-005001.

Respectfully submitted,

Date: _____

5-15-06



Y. Rocky Tsao, Ph.D., J.D.
Attorney for Applicants
Reg. No. 34,053

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906